

Antenna configurations for East Twin River, West Twin River, and Deep Creek

Definitions:

Antenna (plural “antennas”) – one rectangular loop

Array – one row of antennas perpendicular to stream flow

Firing order – Only one antenna is active at a time, so we set the sequence in which they are active. The firing order corresponds to the antenna number.

MUX – Multiplexing transceiver unit. Distributes power to antennas and records PIT tag codes

EAST TWIN

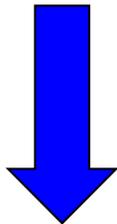
East Twin

9/24/04 – 1/31/05

10'



10'

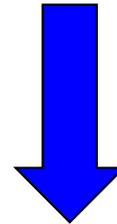


Wet edge low flow

10'

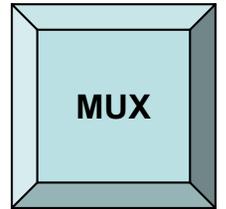


10'



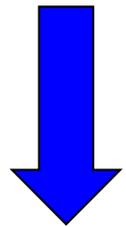
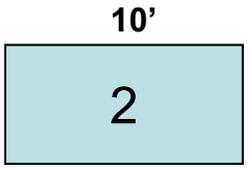
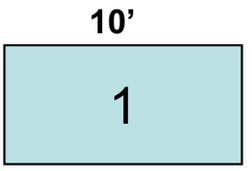
Wet edge low flow

Wet edge low flow



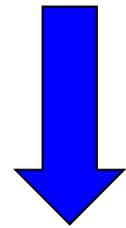
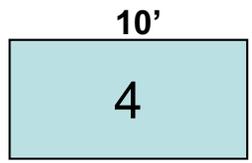
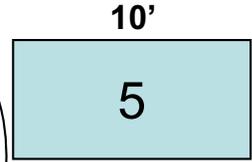
East Twin

1/31/05 – 4/27/05

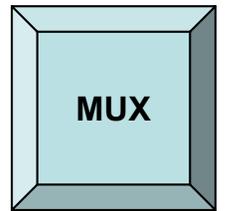
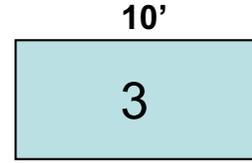


Wet edge low flow

Wet edge low flow

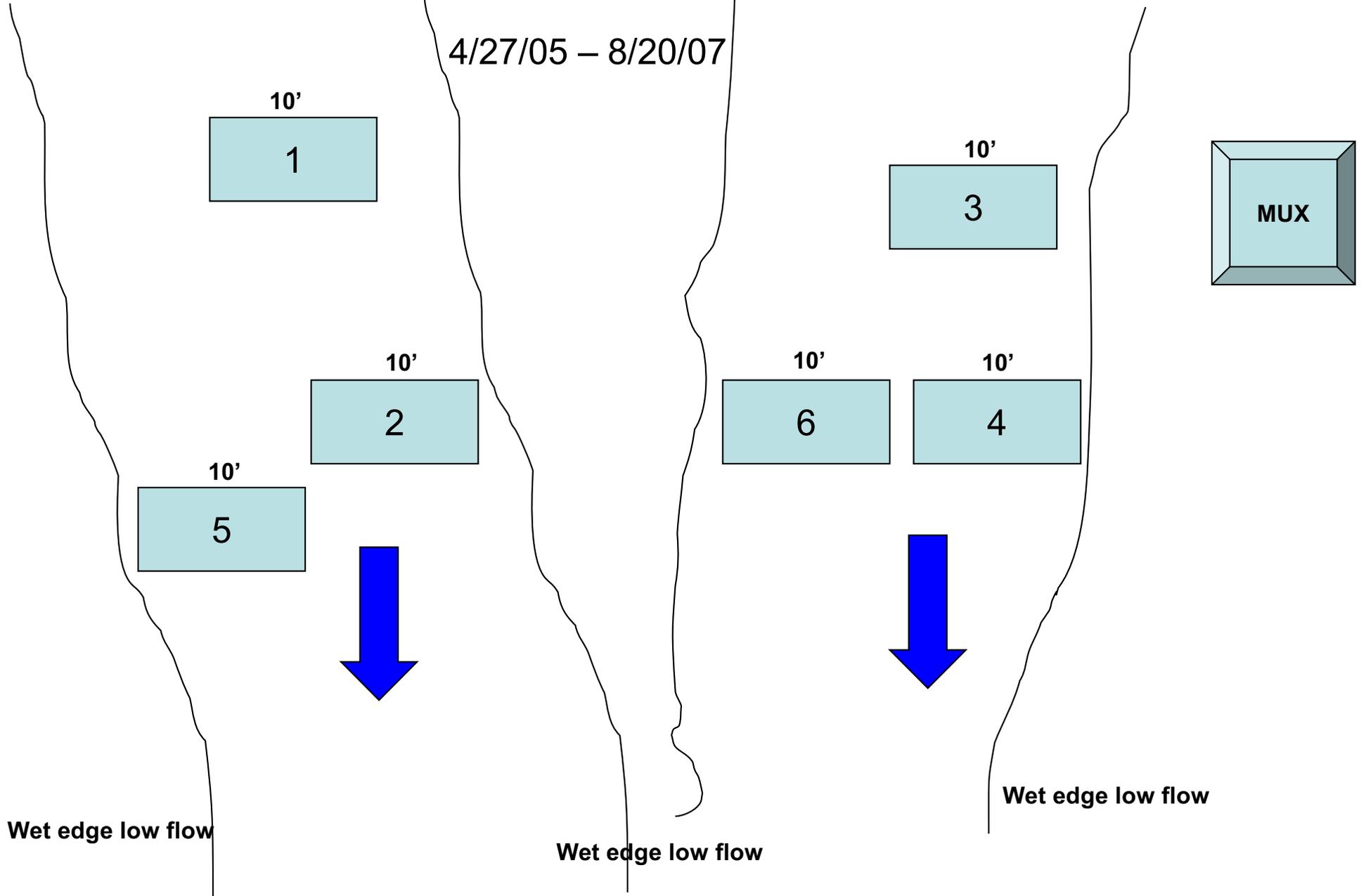


Wet edge low flow



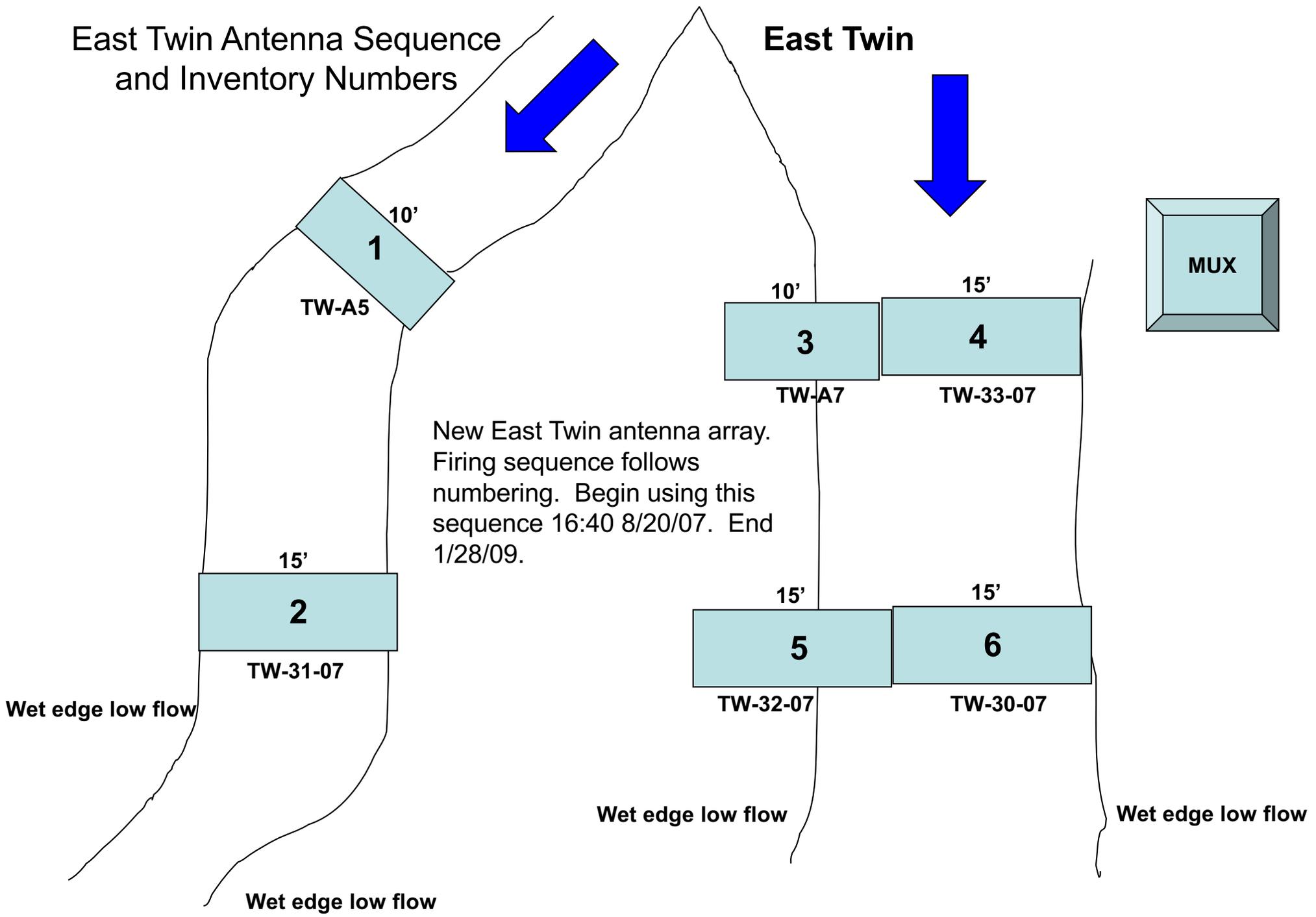
East Twin

4/27/05 – 8/20/07



East Twin Antenna Sequence and Inventory Numbers

East Twin



East Twin

East Twin array. Firing order follows numbering. Begin 1/28/09. End 12/2/09.

Dry under 100cfs

Gravel bar

15'



15'



2

15'



3

10'



4

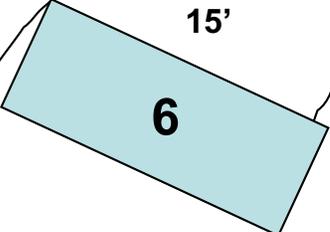
TW-A7

15'

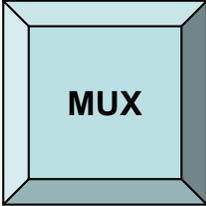


5

15'



6



15' Antennas

TW-30-07

TW-32-07

TW-33-07

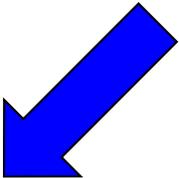
TW-41-07

Unknown

NTS. (But close.)

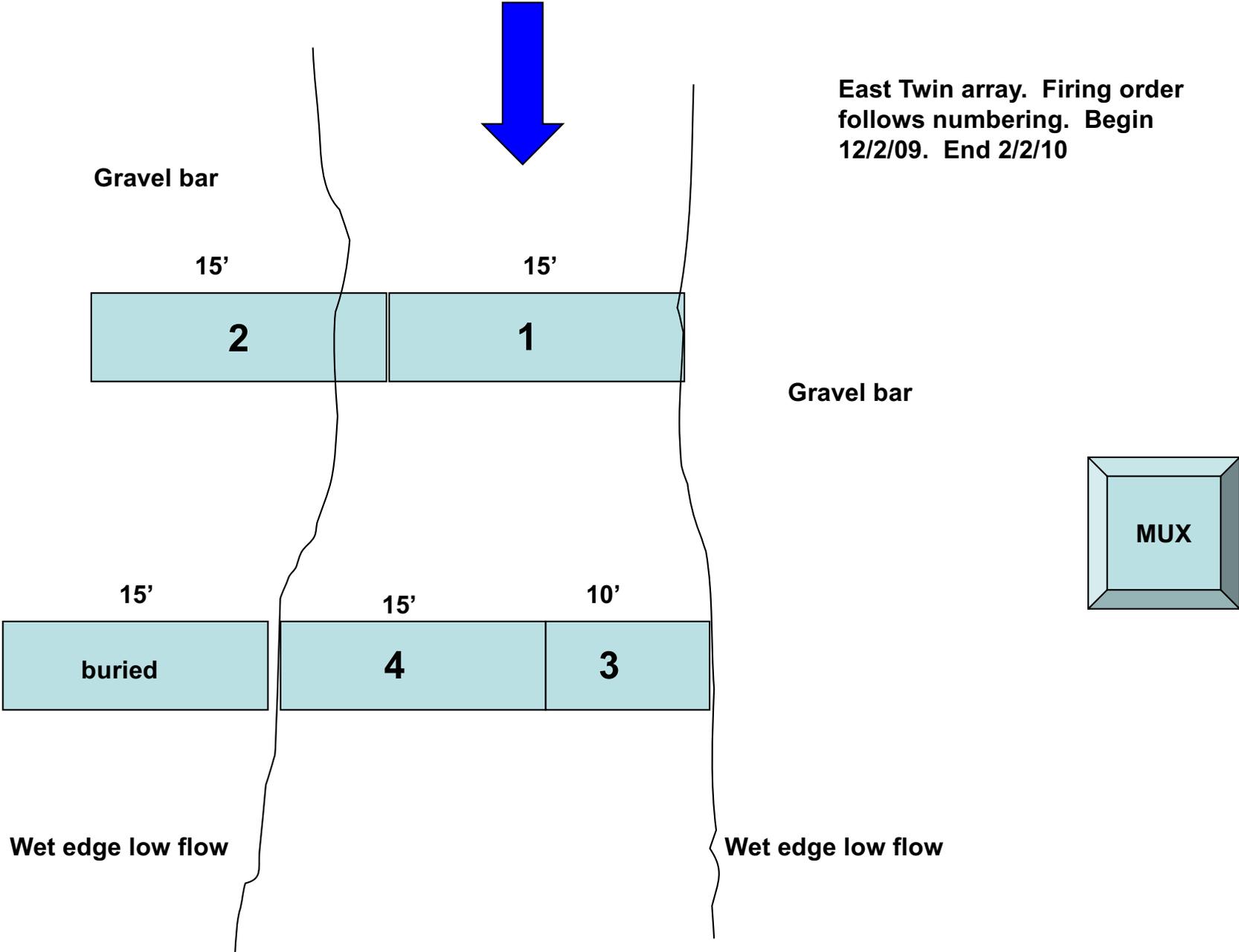
Wet edge low flow

Wet edge low flow



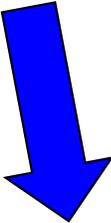
East Twin

East Twin array. Firing order follows numbering. Begin 12/2/09. End 2/2/10



East Twin

East Twin array. Firing order follows numbering. Begin 2/2/10. End 3/31/2011



Gravel bar

15'

15'

15'

On top of gravel



buried

2

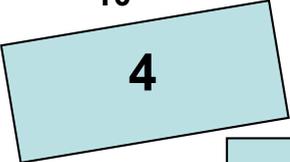
1

15'



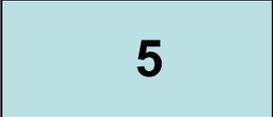
buried

10'



4

10'

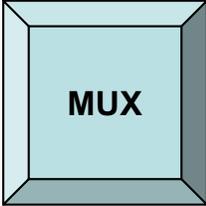


5

6'



3



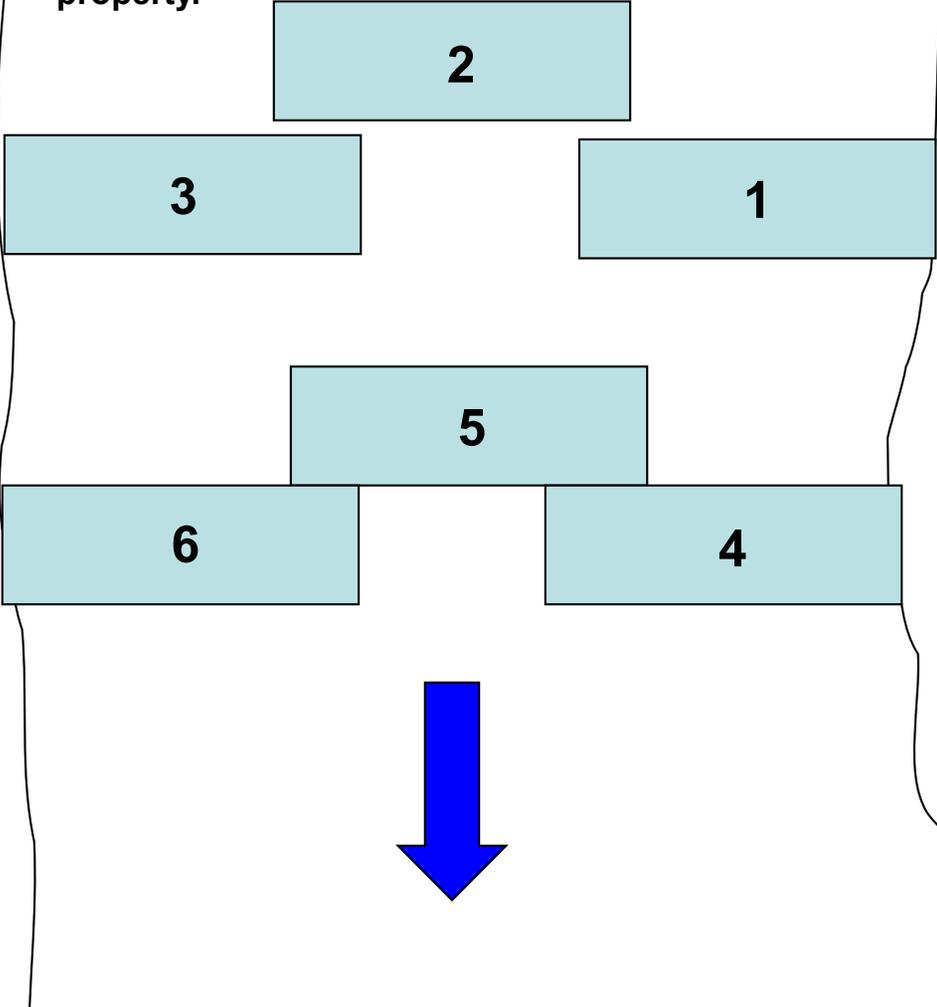
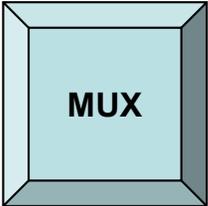
MUX

Wet edge low flow

Wet edge low flow

East Twin

East Twin array. Firing order follows numbering. Begin 3/31/11. End 10/30/2013. All antennas 20'. Moved site downstream to edge of Morse property.

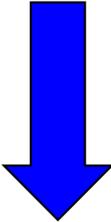
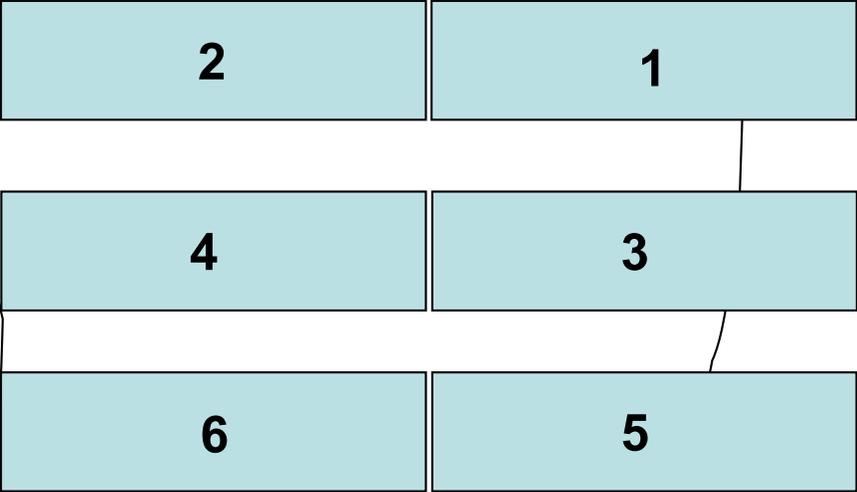
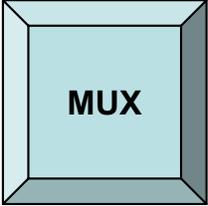


Wet edge low flow

Wet edge low flow

East Twin

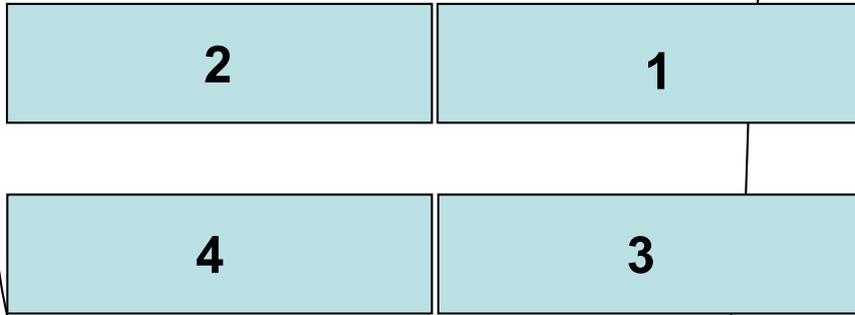
East Twin array. Firing order follows numbering. Begin 10/30/13. All antennas 20'



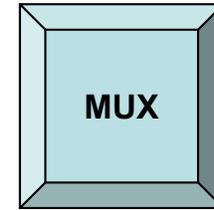
Wet edge low flow

Wet edge low flow

East Twin array. Firing order follows numbering. Begin 4/20/15. All antennas 20'



East Twin



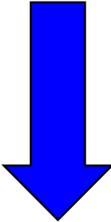
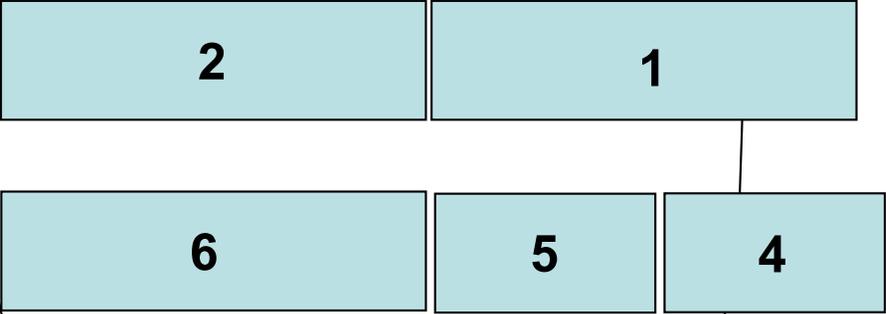
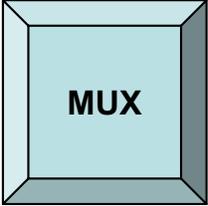
Antenna 3 gradually failing from 1/1/17 until replacement on 4/26

Wet edge low flow

Wet edge low flow

East Twin

East Twin array. Firing order follows numbering. Begin 4/26/17. Antenna 4 NOT in sequence

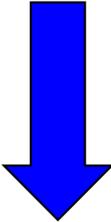
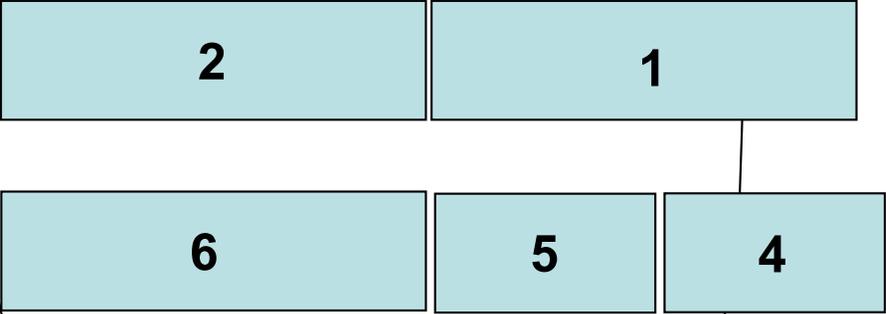
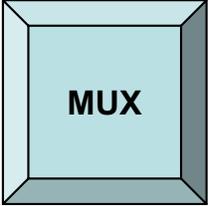


Wet edge low flow

Wet edge low flow

East Twin

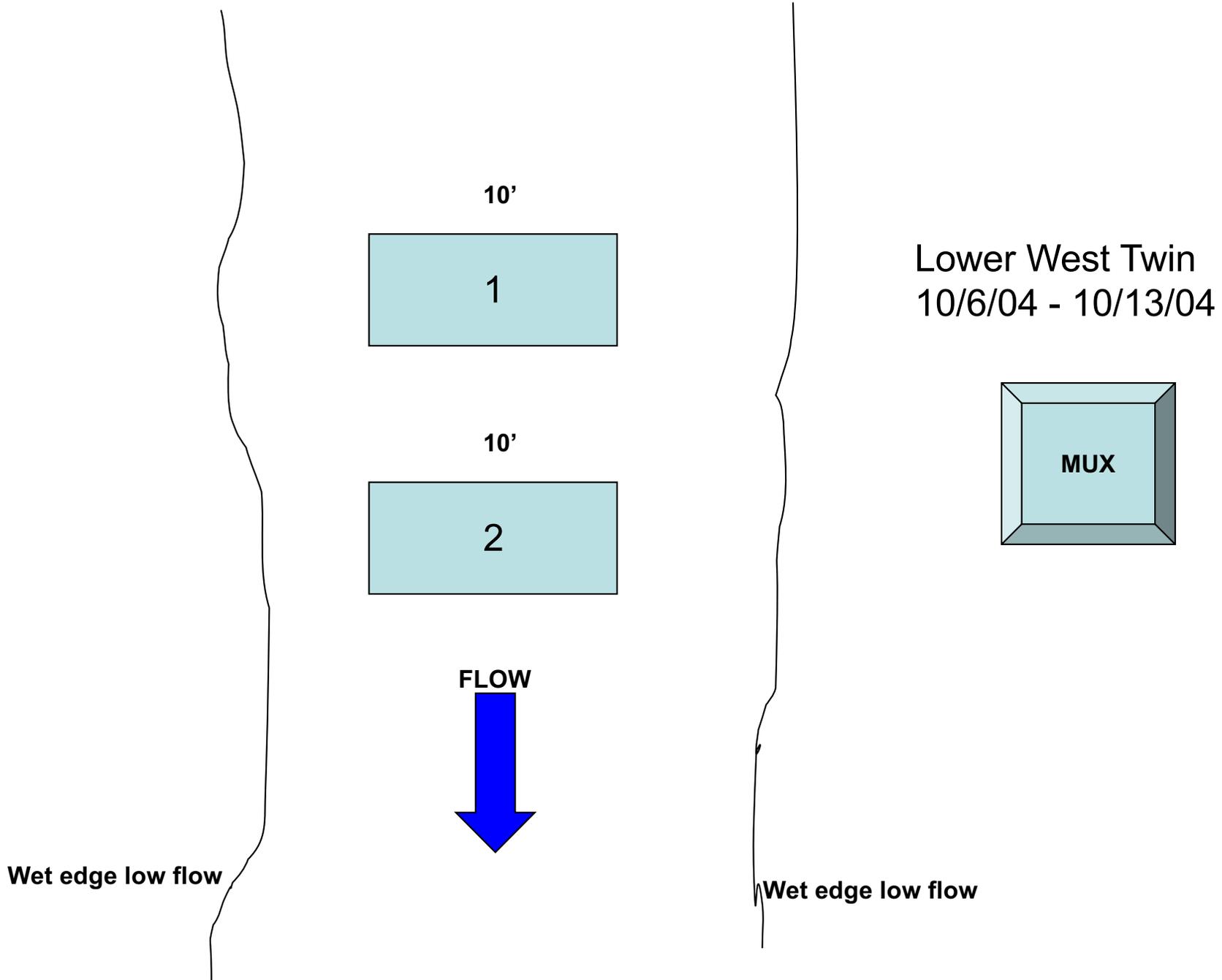
East Twin array. Firing order follows numbering. Begin 5/3/17. Antenna 4 in sequence

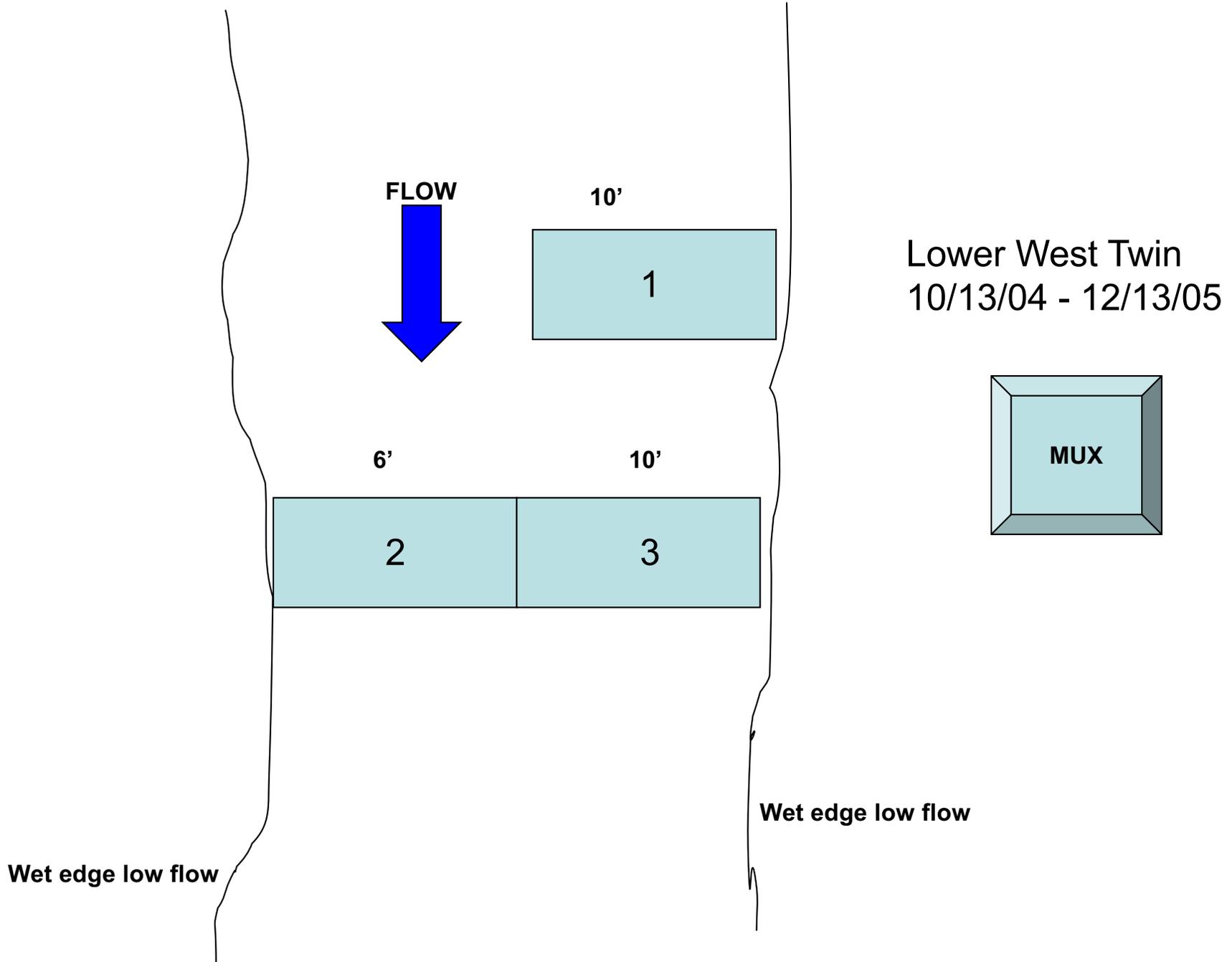


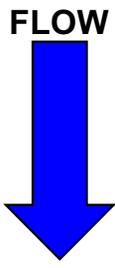
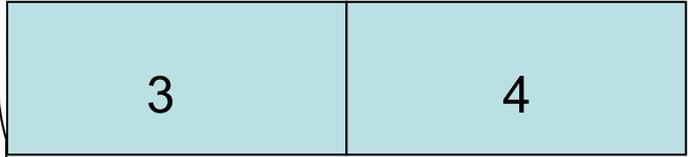
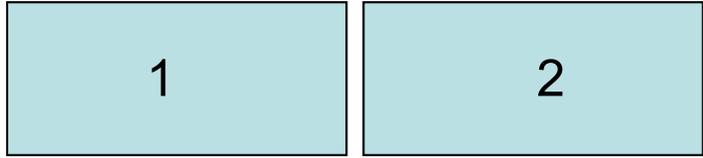
Wet edge low flow

Wet edge low flow

WEST TWIN



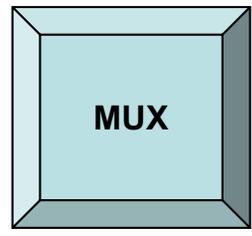




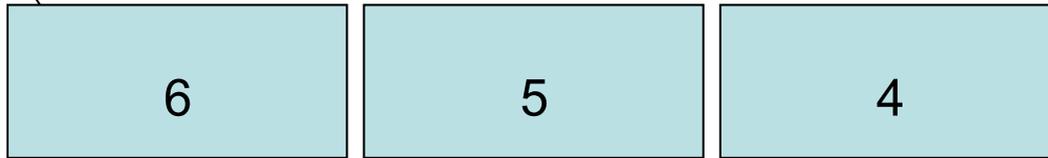
Wet edge low flow

Wet edge low flow

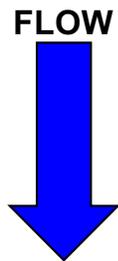
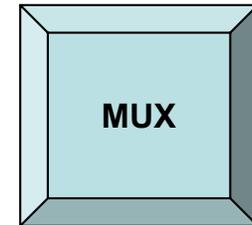
Lower West Twin
12/13/05 – 10/12/06



All antennas 10'

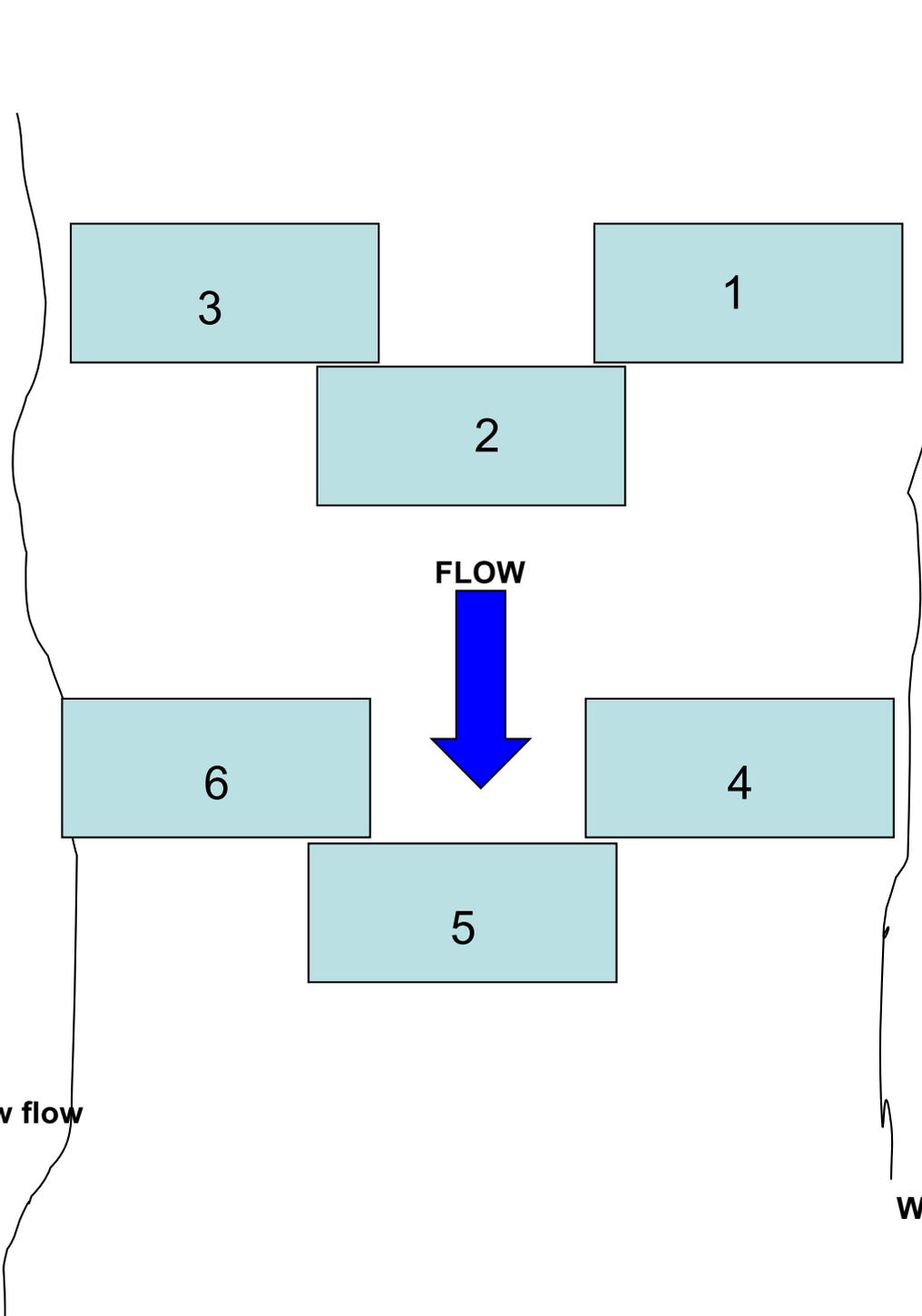


Lower West Twin
10/12/06 – 6/21/07

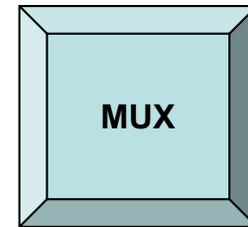


Wet edge low flow

Wet edge low flow



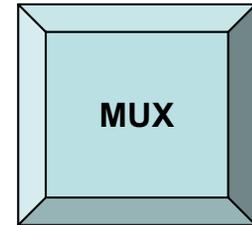
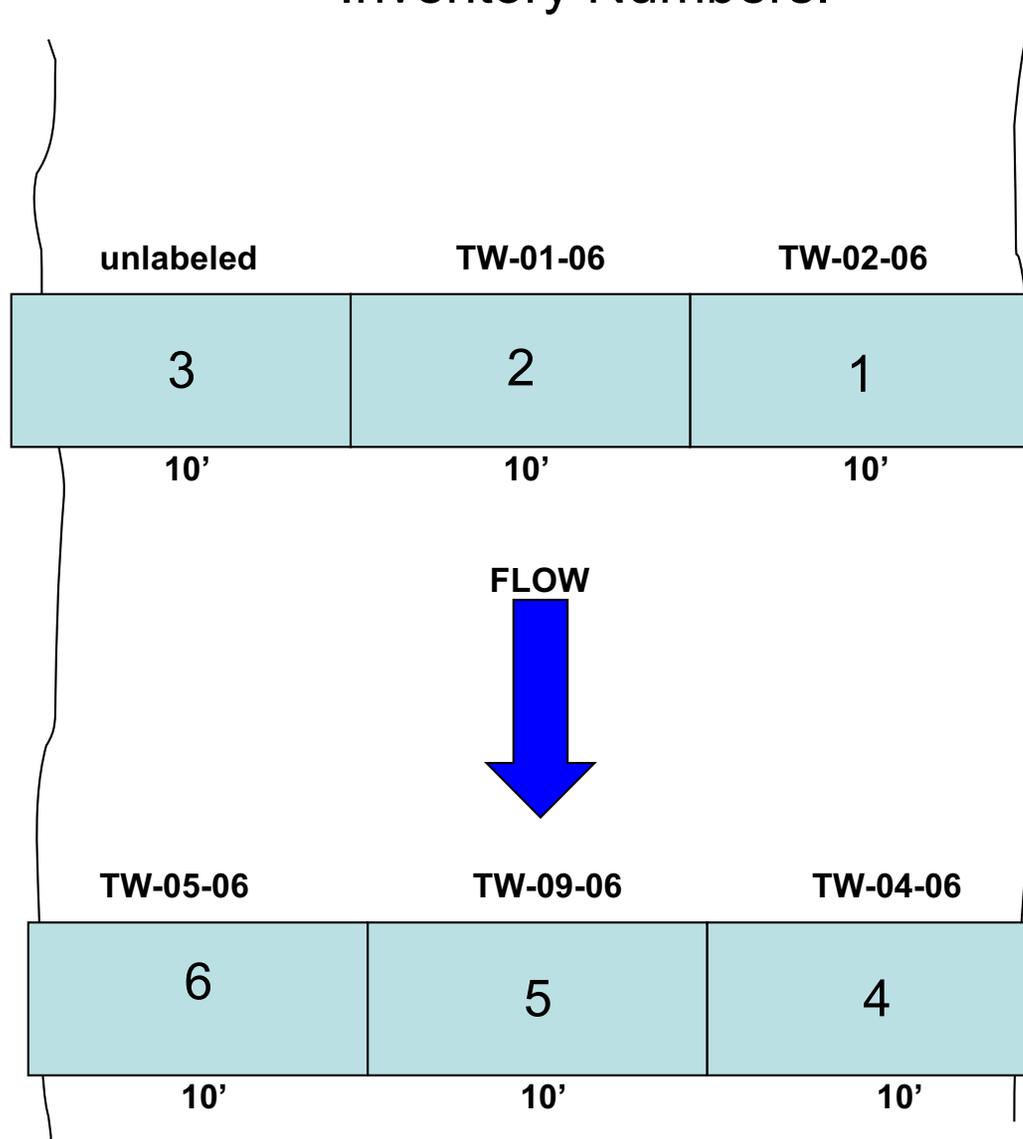
Upper West Twin
4/12/07 – 12/10/07



Wet edge low flow

Wet edge low flow

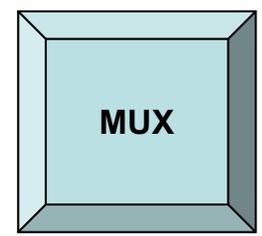
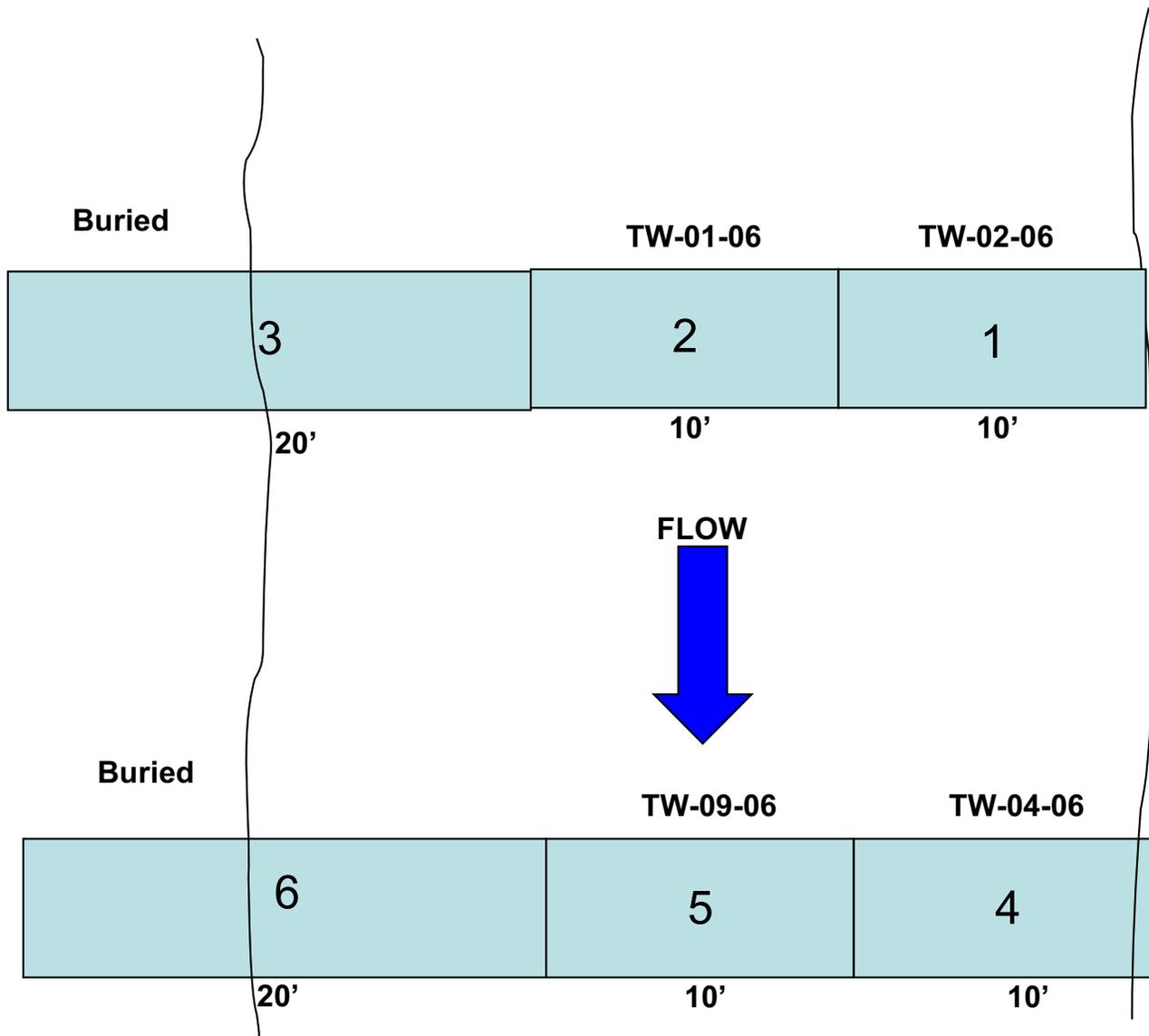
West Twin Antenna Sequence and Inventory Numbers.



Firing sequence follows numbering.
Begin using this sequence 16:41
12/10/07.

Wet edge low flow

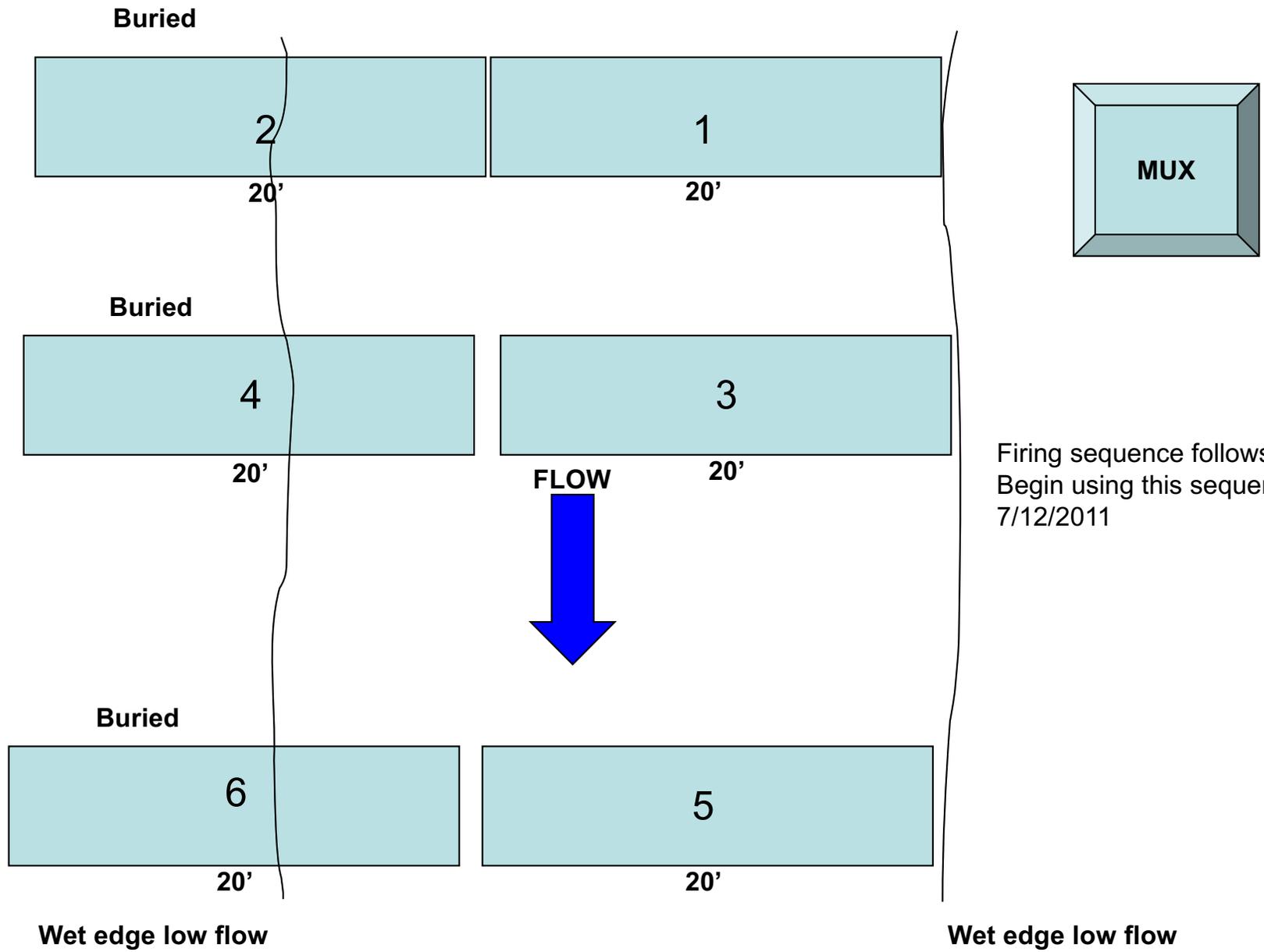
Wet edge low flow

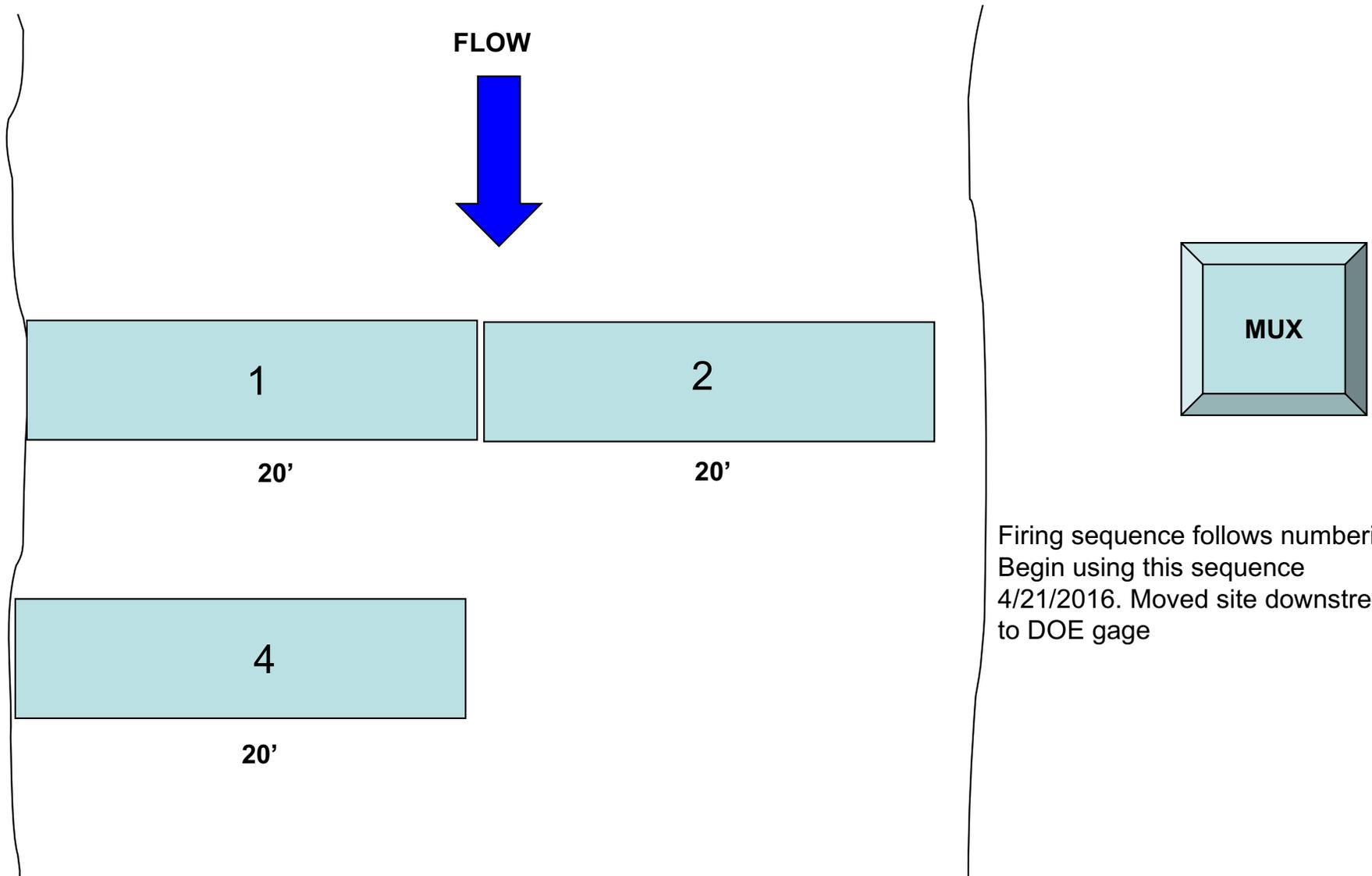


Firing sequence follows numbering.
Begin using this sequence
7/14/2010

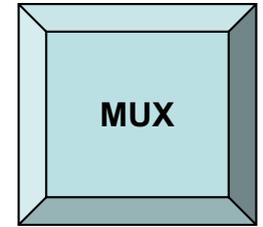
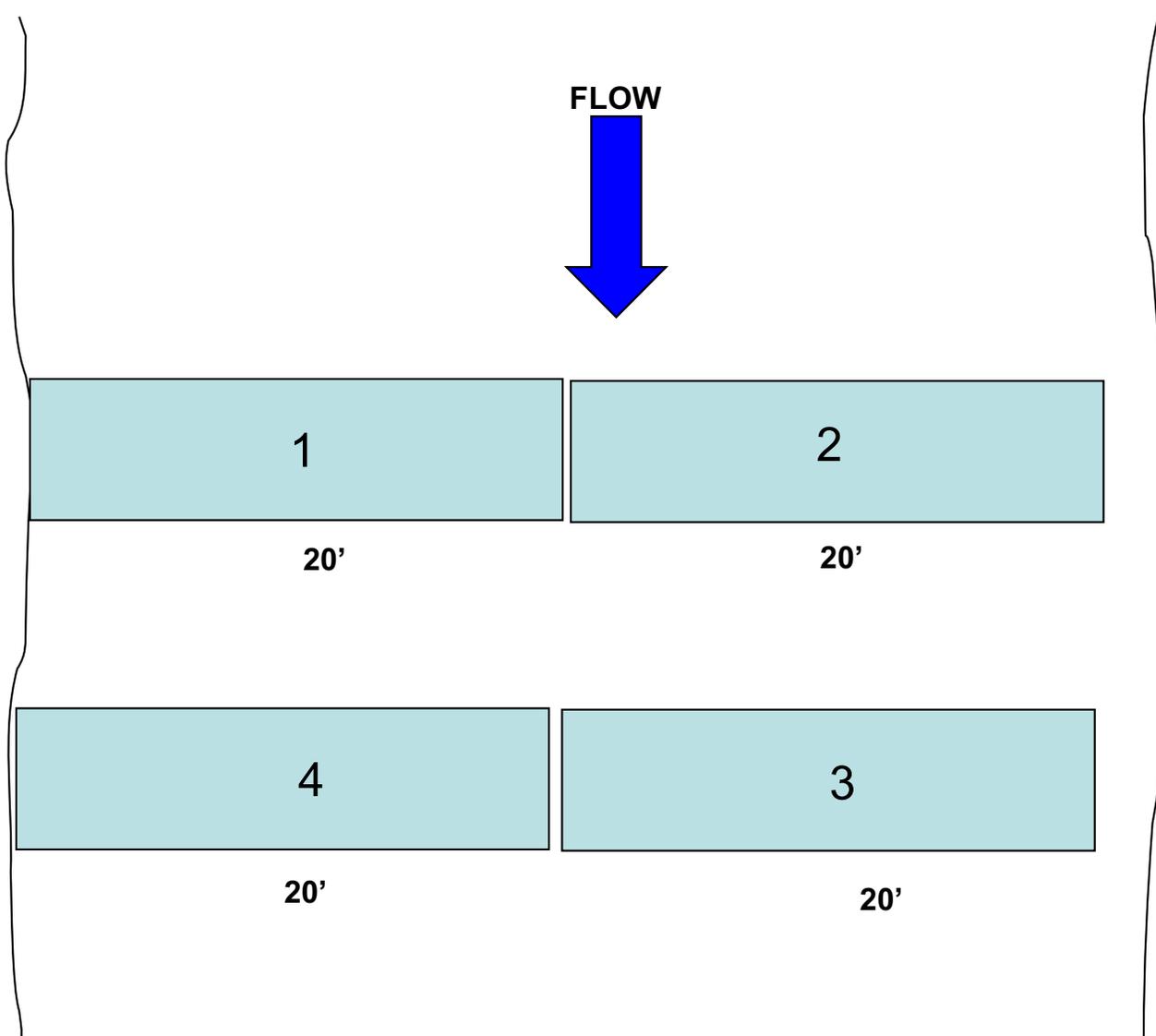
Wet edge low flow

Wet edge low flow





Firing sequence follows numbering.
Begin using this sequence
4/21/2016. Moved site downstream
to DOE gage

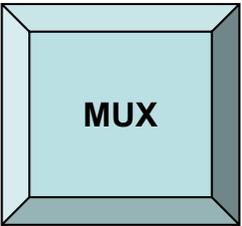


Firing sequence follows numbering.
Begin using this sequence
10/13/2016

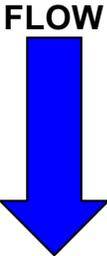
DEEP CREEK

Deep Creek

Deep Creek
8/20/09 – present



All antennas 20'



Antenna 5 broken
from 3/16/17 to
4/26/17. Replaced
Antenna 1 4/26/17.

Wet edge low flow

Wet edge low flow